ENTERED AT STATIONERS' HALL.

As Supplied to H.M. Government.

THE . . .

'Gem'

Sanitary

Domestic

Pure-Water Still.

A HOUSEHOLD NECESSITY.

The Gem Supplies Co., Ltd.

Impure Water.

Water and Disease.

Man can live forty days without solid food, but without liquid in some form or another, he is unable to sustain life beyond five or six days. Yet in these modern times when so much attention is devoted to the manufacture of scientific foods, which shall combine in themselves all that is necessary to the proper nourishment of the body while eliminating that which is hurtful, it is surely strange that the human family continues to be scourged from time to time by the most dreadful of diseases, carried into the system by means of the water we drink. It is true, we have our Sanitary Commissions, Medical Officers of Health, and so-called "Germ Proof" Filters, etc., but these notwithstanding the outbreak of epidemics proves that the question of a pure water supply is far from settled. The periodicity of these water-borne diseases emphasises the necessity of so treating the domestic water supply—the water we drink—that while we derive from it the utmost benefit, we protect ourselves against the germs of such diseases as typhoid, enteric fever, cholera, and the like.

Typhoid at Lincoln.

During the winter (1904-5) typhoid fever broke out in Lincoln, and by March 800 cases had been notified, and there were 40 deaths. The germs of typhoid were found in the public water supply.

Ravages of Enteric.

In the South African war, out of 21,007 deaths, 12,664 were due to disease in some form or another, but principally to enteric fever—a water-borne disease. A well-known writer says:—"The powerful ravages of this disease ought surely to have impressed its danger upon us, and its direct relation to dirt and **foul water.**"

Southwark Typhoid Epidemic.

In Southwark, a populous London district, an outbreak of typhoid fever, which occurred a few years ago, produced 100 cases of disease in less than a fortnight. In the middle of November, 1900, the Czar of Russia,

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the ruler of millions of people, able to command all the resources of civilisation, was laid low with typhoid fever **caused through drinking impure water.** When crowned heads are attacked by this insidious disease, how easy must be its propagation amongst those who cannot live amidst the highest sanitary conditions.

Army Devastated: Navy Untouched.

At Plymouth, Pennsylvania, no less than 150 people died from drinking water which appeared to be clear and tasted good, but which was infected with the excreta of a single person. In December, 1900, there was a serious outbreak at Renlies, in Belgium, of "coal typhus," caused by the consumption of water from a brook which skirted a neighbouring village cemetery. In the war with Spain, typhoid fever germs in polluted water devastated the ranks of the American Army in Cuba, whereas in the Navy, **where distilled water only is used,** there was not a single instance.

Conclusion from the Facts.

These startling facts serve as a warning, and point to the absolute necessity of using **pure** water for drinking purposes. Cities, towns, and villages empty their sewage, reeking filth, slops, rotten animal and vegetable matter into our rivers, lakes and streams. Filter beds, while doing much to purify water, cannot make it **safe.** Even when living in what seems to be favourable surroundings one cannot be sure of a pure water supply. **"Never drink ordinary water"** is the advice of more than one eminent physician; and it is good advice, for **clearness** is no evidence of **purity,** and even chemical analysis cannot prove **safety.** The only really pure and absolutely safe water is distilled water.

What the Microscope Reveals!

A Drop of Raw Water.

A Drop of Distilled Water.

Which will YOU drink?

Filters are Hotbeds of Microbes.

The so-called Germ-Proof Filter is a Myth. Eminent scientific authorities are agreed in their pronouncements that the ordinary domestic filter, in so far as the removal of disease germs is concerned, is worse than useless, and is, indeed, a **disease-breeding apparatus.**

Filters cannot destroy Microbes or Germs of Disease. They only strain out the mud, but do not remove all the germs of disease. Filtered water looks clear to the eye. You can't see the microbes, but they are there just the same—millions of them. When you realise that 500,000 disease germs can live in one centimetre of water—a million in a drop—it is strange that the best, finest, and most expensive filters on earth, no matter how small the pores, will not stop them! Where water can go they can go.

The only effect of a filter is to clarify the water. The minute germs of disease can pass through the interstitial spaces of any filter, a hundred or more abreast, so that, according to Professor Folkard, for the removal of insanitary agencies in polluted water filters are **misleadingly worthless.** The chemist to the Brooklyn Board of Health emphatically states that most filters **soon clog**, and **become germ producers.**

"No filter," says Dr. C. G. Currier, of New York, "has yet been discovered that will produce germ-free water without frequently sterilizing the filter before use, which is hardly practicable in domestic use, and certainly never done; it requiring the greatest care and experience to sterilize and keep filters free from germs."

Boiled Water.

Simply a Graveyard.

Some people imagine that to boil water is a safe and certain method of removing its impurities, but in language more truthful than elegant, one authority affirms that boiled water is simply a graveyard in which float the carcases of millions of microbes, while the **absolutely pure water** has been carried off in the form of steam. And, moreover, the boiling of water does not remove from it all the minerals which it holds in solution, although a portion of them may be deposited as a sediment.

The Coated Kettle.

Look into a tea kettle and note the deposited mineral matter. Much similar matter is held in solution and taken into the system, forming a coating or crust around the heart and internal organs, and in the veins, arteries and blood vessels (like the crusts formed on the sides of the tea kettle), and remember that this is not only the cause of old age, but also the cause of the ossification of the bones, and the breaking down of the blood vessels and nerves. It causes kidney troubles, stone or gravel in the bladder and kidneys (calculi), Bright's disease, paralysis, locomotor ataxia, heart failure and rheumatism; and wrinkles the face, stiffens the joints, ruins the skin, poisons the blood, and shortens life.

The Elixir of Life.

It has been observed that people who have drunk boiled water for many years have become aged far beyond their time, with wrinkled features, stiff joints and organic diseases, caused by calcareous deposits in their veins and tissues. On the other hand members of families who have used distilled water have appeared young and fair, rosy cheeked, smooth of face, bearing no traces of age or decrepitude.

Distilled Water.

THE ELIXIR OF LIFE.

Distilled water, which might be fitly termed the "elixir of life," is simply pure steam converted back to water by condensation. In this process all impurities are left behind. Distilled water has wonderful solvent properties. Its effects are felt immediately, for it is rapidly absorbed into the blood and dissolves the poisons, lime and acids, which cause disease, debility, sluggishness and ossification, the impurities being carried away by the excretory organs. The result is great benefit to health, and a feeling of rest, comfort, gratification and purity within. Distilled water purifies the blood and equalises the circulation, thus removing the cause of sleeplessness and nervousness.

The liver is awakened, cleansed and instilled with new life. The stomach, kidneys, and bowels are flushed, and poisonous waste matter eliminated from the entire system. The dormant energies are aroused, the stomach is restored to its natural condition, dyspepsia and constipation are overcome, and after one week's use there comes a feeling of buoyancy—of new life and new vigour.

Some time ago the Ralston Health Club of America, the most famous health organisation in the world, conducted an experiment with two young ladies—one under twenty-five, and the other past that age, and growing old unmistakably. The elder drank no liquid except pure distilled water for three years, and at the end of that period she looked younger, fresher and sweeter than her sister, just reversing their previous condition. Old age matter consists of calcareous deposits, which get in the skin, blood, arteries, veins, organs, bones and muscles. All wrinkles, discolorations, and evidences of old age are due solely to calcareous deposits.

THE

Gem Pure-Water Still.

The Gem Pure-Water Still is the most efficient and economical domestic apparatus for the distillation of water ever invented. It requires but slight attention and no experience on the part of the user, and costs a mere trifle for gas, oil, or firing.

THE GEM STILL can be used on any good oil stove, gas ring, or closed kitchen range.

The Gem Still separates and removes mud, minerals, lime, old age and earthy matter, alkali, microbes, bacteria, poisonous gases, acids, fever and disease germs,—in fact, **every impurity**—from water, whether from hydrant, well, cistern, river, pond, creek, lake, spring or ocean. No matter how foul the water may be, the Gem Still makes it, not only **clear**, but **pure** and **safe.**

No invention of the century has met with such universal appreciation. **For the first time** in the history of the world pure distilled water is placed within the reach even of those of limited means.

On a good oil stove or gas ring, the No. 1 Still

WILL PRODUCE ABOUT ONE QUART OF DISTILLED WATER PER HOUR.

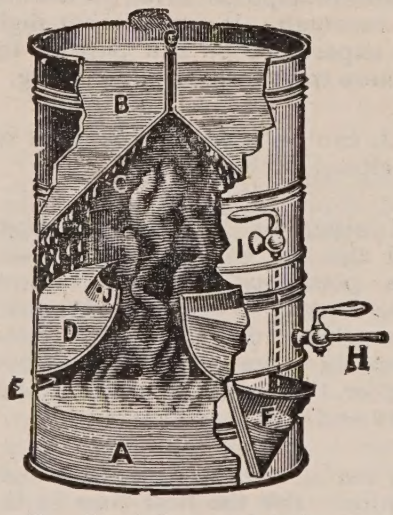
The more powerful the stove, the more distilled water may be made.

The No. 1 Pattern, with a good oil stove (SEE OUR CIRCULARS) or gas ring, will make nearly two gallons of distilled water at a cost of 2d.

The distilled water produced by the Gem Still is delicious as a beverage, as a table water, is better and cheaper than spring or mineral waters, invaluable for the home, indispensable in the sick room, in the hospital or during epidemics; it prevents disease, promotes perfect health and longevity; it prevents ossification, which causes premature old age; it wards off epidemics, renews youth, and beautifies the complexion.

THE

Gem Pure-Water Still.



A. The Boiler. Where raw water is generated into steam.

B. Condenser Reservoir. Contains cold water.

C. Condensing Chamber. Where steam is condensed.

D. Distillate Reservoir. Where distilled water is stored until drawn off.

E. Sterilising Chamber.

F. Feed Cup and Indicator. Used to replenish the Boiler (A). Shows the amount of water in it.

G. Ventilating Flue.

H. Distillate Faucet. For drawing off distilled water.

I. Condenser Faucet. Used to keep the boiler (A) supplied.

Simply fill the Boiler (bottom part, A.) and the Condenser Reservoir (B.) with raw water.

Set the Condenser Faucet (I.) to drip into the Feed Cup (F.) so as to replace the water being converted into steam in the Boiler (A.)

Except that the water in the Condenser Reservoir (B.) requires to be changed occasionally as it gets hot, the Still requires little or no attention.

Through an air tube a sufficient supply of air is drawn into the Still to further promote rapid condensation and supply the condensed steam with oxygen, one of the principal elements of water.

These operations form the basis of "Gem" Distillation, which has so greatly popularised the use of "Gem" Distilled Water for drinking purposes.

By our process the supply of air is purified and sterilized, as it first passes through the scalding steam, destroying the microbic life and arresting other atmospheric substances.

As fast as the water is distilled it accumulates in the Distillate Reservoir away from the dust and odours of the room. It should be drawn off from time to time by means of the Faucet and piece of tube supplied (see H on previous page) to a water bottle, for use when required.

In the process of purification the water becomes heated, the bicarbonates are gradually decomposed, the insoluble carbonates precipitated and the free volatile matter liberated and expelled. All ammonia, ammonia albuminoids, chlorine, and other injurious gasses, the product of decomposition of organic matter, are driven off. All other impurities, such as mud, lime, minerals, microbes, etc., are separated from the water—the microbes being **killed** as well as removed.

The Still can't boil dry if the instructions are followed.

No running water is required to feed the No. 1 domestic Still. It needs no hydrant connections, no plumbing. You can lift it on and off as you would an ordinary tea kettle.

It cannot explode, because the steam is not generated under pressure.

DESCRIPTION.

The Gem Still is made of the finest copper, tin-lined, and with ordinary care will last for years. The workmanship is first-class in every particular, and the Still is not only durable but handsome. It embodies the latest improvements in scientific construction. As it is made in three separate detachable parts, it is a simple matter to clean it thoroughly when necessary.

The handles are of brass, securely rivetted to the Still.

The Faucets are finely made, handsomely nickel-plated and securely attached.

The interior surfaces are lined with pure block tin (insoluble in distilled water) so as to prevent corrosion. The Still lifts apart, packs in a small space, and is easily carried. It is about 14 ins. high, 9 ins. in diameter, and weighs nearly 4 lbs.

No. 1 DOMESTIC STILL.

PRICE **40/-**

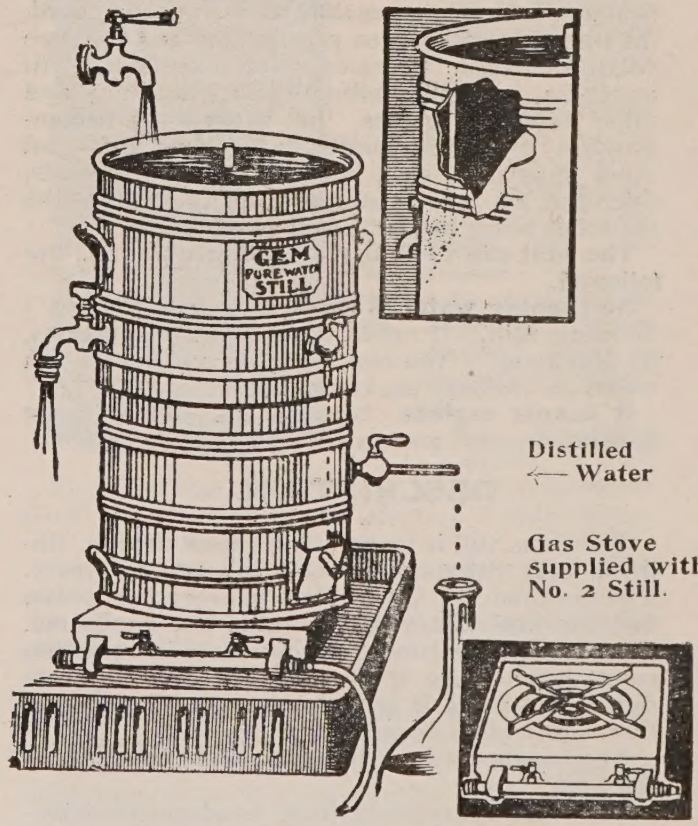
The same, beautifully nickel-plated throughout, 50/-.

Boxing and Carriage, 1/- extra.

CASH WITH ORDER.

The No. 2 Gem Commercial Still.

Regd. No. 18233.



The Still (of which we are the Patentees and sole makers) has been specially designed for the use of those who require larger quantities of distilled water than can be made with our No. 1 domestic pattern.

The No 2 can be used only where water and gas are laid on.

The accompanying illustration explains fully the construction of the No. 2 Still. When adjusted to a continuous water supply it will work automatically, beyond the occasional drawing away of the distilled water, and even this may be entirely

obviated by allowing the distilled water to drip constantly into a suitable receptacle. This done, it requires very little attention.

For Chemists, Druggists, Physicians, Electricians, Photographers, and for domestic use where large quantities of distilled water are required, it is the ideal apparatus.

This No. 2 Automatic Still is supplied with a special pattern gas stove, free, by means of which it will make about 3 quarts of distilled water per hour, with a consumption of 36 cubic feet of gas per hour, equivalent to a cost per gallon of distilled water of 1½d.

It is extremely simple in construction, and can be adjusted for use by anyone of ordinary capacity. It is about double the size of our No. 1 domestic Still.

No. 2 Commercial Still, strongly made in copper, lined with tin, and complete with special stove,

£4. Carriage and Boxing, extra.

If desired we can make specially large Stills to order. Quotations on application; size of Stove: Height, 15ins.; Diameter, 13½ins.; Stove, 13ins. by 11ins. by 3ins.

Spontaneous Testimony.

What "The Lancet" says:—

We have used the apparatus with success, and have found that the distilled water is free from mineral impurities and free from metallic contamination. Of course, the water so obtained is sterilised. The apparatus is very handy, and, consequently, would be of great service when any suspicion of the purity of the ordinary drinking supply is entertained. The Still we examined was sent to us by the Gem Supplies Co., Ltd.

"The Lancet," 16/1/03.

DR. MOLSON, of London and Brighton, writes:—
"I like the new Still very much."

SPONTANEOUS TESTIMONY.

LADY DODSWORTH writes: "The water here (Clifton) is so full of lime, I advise all my friends to use the Still."

WORNDITCH HOUSE, KIMBOLTON, ST. NEOTS.
"Mrs. BALLER LONGWORTH begs to say that she has used the 'Gem" Still and finds it very satisfactory,"

DR. CLIFTON, 34, Corn Market, Derby, says: "I sent one of your pamphlets to a patient of mine resident at Southport, re 'Gem' Pure Water Still, suggesting he should drink freely of distilled water and telling him of my Still, and how well it acted."

"BARONESS KONIGSWARTER requests the Gem Supplies Co. to send her by post or Grand Vitesse one Still. She is extremely satisfied with the one she bought last December for her Cottage Hospital."—SOLNITZ BOHEMIA.

The EDITOR OF THE ENGLISH MECHANIC writes:—"To-day in every civilized country it is unfortunately the case that drinking water is more or less poison. No filter can guarantee germ-free water. The one safeguard against these evils is the persistent use of distilled water." THIS GENTLEMAN USES A GEM STILL.

"Will you kindly forward by return one No. 2. Still to the Dowager Countess Roden. We find the one we received from you works admirably. We want this for a present.—HOUSE STEWARD.

"The Honourable M. Sandy recommended me your Still. G. FITZWILLIAM."

The REV. P. COPPIN says:—"The Gem Pure Water Still gives me every satisfaction."

CHINA INLAND MISSION, CHEFOO, NORTH CHINA.

"GENTLEMEN,—I am the medical officer for the Schools and Sanatorium of the above Mission at Chefoo. I have been much pleased with the Copper Still and Bath Cabinet of your firm used by Mr. W. E. Burnett here, an old friend of mine. I have sent your printed descriptions of them with a very earnest commendation of the Still to our Director in Shanghai, urging him to take steps to procure some for our missionaries, and I hope he may accede to my request. In any case, I would be obliged if you would please send me two of your Copper Stills and two of your Bath Cabinets; also two 'Friction Towels' with the Bath Cabinets. I wish your No. 2 Special Cabinet at £2 15s. 0d.
(Signed) GEORGE E. J. KING, M.B., B.Ch., Edin."

FACSIMILE OF

ANALYST'S REPORT.

Dr. A. B. GRIFFITHS,

F.R.S. (Edin.), Ph.D.

12, KNOWLE ROAD, BRIXTON,
LONDON, S.W. Sept 7th 1901.

The Gem Still and Gem Distilled Water.

I hereby certify that the Distilled Water produced by "The Gem Still" is absolutely pure and free from bacteria. Ordinary water always contains bacteria, and sometimes contains those of cholera and typhoid fever.
The "Gem Still" completely removes salts, bacteria etc., and it aerates as well as sterilizes the water. It is so simple in its construction that it can be used in any house.
I can thoroughly recommend the "Gem Still" and "Gem Distilled Water."

A. B. Griffiths, Ph.D., F.R.S.E.,
Principal of the Brixton School of Pharmacy,
Author of "A Manual of Bacteriology," etc.

The "Primus" No. 5 Stove.

Is known all over the world as the best and quickest of any Stove for rapid boiling.

It burns Paraffin without a wick, and gives off no smell.

It is perfectly safe and easily managed.

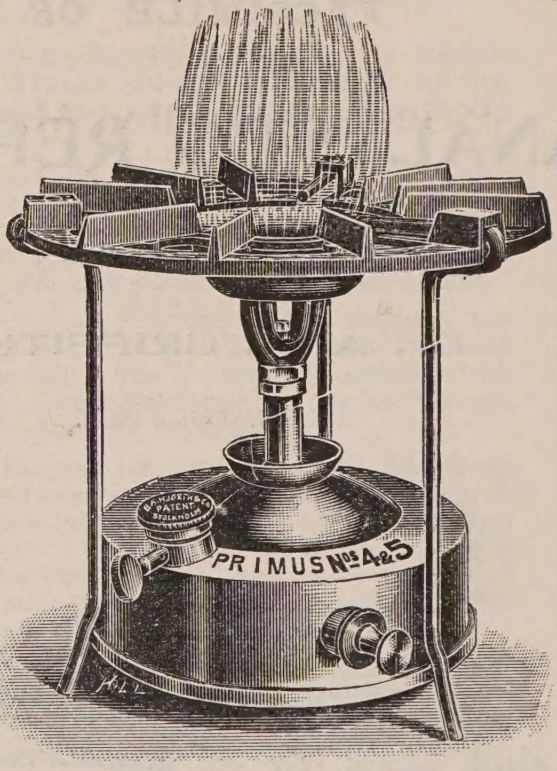
Holds two pints of Paraffin, and costs about ¼d. per hour.

Price:

12/9

each.

Post Paid.

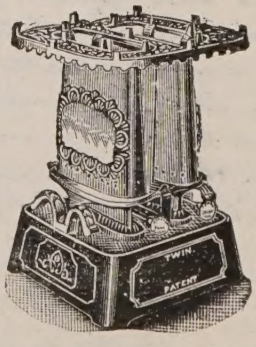


The New Atmospheric Gem Oil Stove.

This is a simple and effective paraffin oil stove, suitable for use with the Gem Pure Water Still and Gem Steam Cookers, as also for ordinary boiling and heating purposes.

It has two burners. Burns with a blue flame, gives intense heat and no smell.

Finished in white enamel, it is elegant and easily kept clean.



A very useful and satisfactory stove. Size 10 inches by 11 inches. Height, 12 inches.

Price - 12/6 (Carriage Extra).

Principal Uses

OF THE

"Gem" Distilled Water.

FOR DRINKING PURPOSES.—It is delicious, clear as crystal, sparkling, soft as dew, every drop full of health—nothing more refreshing, cleansing and invigorating than a glass of Gem Distilled Water. Try it and you will be delighted; no other will ever pass your lips. It is the acme of purity. The only safe water for families, infants, children, invalids and athletes, the young and old. The "Gem" Still is invaluable for tourists, picnic, camping and boating parties. Do your own distilling; you then know what you drink.

FOR NERVOUS PROSTRATION.— Delicate people should cultivate the water drinking habit. It improves digestion, assimilates the food, flushes the entire system and purifies the blood, thereby feeding and strengthening the weak nerves. Thousands of weak and nervous people have found Gem Distilled Water a grand tonic and invigorant. There are thousands of other men and women dragging their listless bodies about who could be made well and strong in a few weeks by drinking copiously of it, and so driving out the poisons. **Try it.**

RHEUMATIC & NEURALGIC CONDITIONS are caused by lime, urates, uric acid, and poison in the blood. Everyone knows that drugs will not cure these diseases. There is but one way—dissolve the poisons and eradicate them from the system. The greatest solvent of these poisons known to the world to-day is Gem Distilled Water. Drink great quantities of it and it dissolves the acids, crystals and poisons in the blood, so that the excretory organs are enabled to discharge them from the system.

DYSPEPSIA—A cup of Gem Distilled Water taken morning and evening and 30 minutes before each meal will cure the worst forms of stomach trouble, dyspepsia, etc. Give it a trial is all we ask. We have yet to hear of a single case not benefited or cured. It dissolves and removes the poisons from the blood, awakens the nerves, flushes the entire system and restores healthful assimilation and nutrition. **That old nauseating feeling disappears,** and instead you feel the vim and vigor of younger days. **Don't be miserable longer. Order a Still to-day.**

TOURISTS AND TRAVELLERS find the Gem just the thing to take on a trip—it ensures pure water. When lifted apart the Still is in three pieces, and requires but little space in a trunk. With a bunsen gas burner and rubber tube for connections, or a small oil stove, pure distilled water can always be obtained.

PHOTOGRAPHERS find distilled water indispensable for preparing baths and solutions. Amateurs and beginners often find most of their trouble caused by using impure water.

The Gem Pure Water Still removes **all** impurities from water, and is the **only safe guard** against **Typhoid** and other water-borne diseases.

SOLE MAKERS AND PATENTEES:

The Gem Supplies Co., Ltd.,